

Claims

1. (Currently Amended) A method of transmitting in time slots in TDMA frames user data in bursts of GSM format, each burst comprising data portions separated by a training sequence,

the method comprising:

providing user data from at least two users having the same data rate requirement;

encoding said user data from the at least two users into a single RLC/MAC block;

allocating at least one time slot of a TDMA frame to the RLC/MAC block;
and

transmitting at least a portion of the encoded RLC/MAC block in the allocated at least one time-slot such that it carries user data from each of the at least two users, by transmitting only data of a first user in a first data portion of a burst before the training sequence and only data of a second user in a second data portion of the burst after the training sequence.

2. (Previously Presented) The method of claim 1 including transmitting each data portion in a sub time-slot allocated to a different user.

3. (Previously Presented) The method of claim 2 comprising transmitting user data in each time slot in a burst structure, including transmitting user data in each sub time slot in a corresponding burst structure.

4. (Previously Presented) The method of claim 3 in which a burst structure has n bits, the method including partitioning each time slot into m sub time slots, and transmitting user data in each sub time slot in a corresponding burst structure having n/m bits.

5. (Previously Presented) The method of claim 3 in which the user data comprises speech.

6. (Previously Presented) The method of claim 1 in which the TDMA system is an EDGE packet switched network.

7. (Previously Presented) The method of claim 6 in which the TDMA system is a wireless system, the method including encoding, in up-link, data from p users such that each forms $1/p$ of an RLC/MAC block, wherein the data from each user is encoded into a respective one of p sub-time-slots.

8. (Previously Presented) The method of claim 7, including transmitting the RLC/MAC block over four TDMA frames.

9. (Previously Presented) The method of claim 1 including encoding the user data into an RLC/MAC block for transmission, and transmitting the RLC/MAC block in a sub-time-slot over a plurality of frames.

10. (Previously Presented) The method of claim 1 including encoding user data associated with at least two users into a single RLC/MAC block, and transmitting the portions of the RLC/MAC block associated with respective users in respective sub-time-slots.

11. (Previously Presented) The method of claim 1 including transmitting the user data in each time slot in a burst structure having n bits, partitioning each time slot into m sub time slots, and transmitting user data in each sub time slot in a corresponding burst structure having n/m bits.

12. (Previously Presented) The method of claim 11 in which the user data comprises speech.

13. (Previously Presented) The method of claim 12 in which the TDMA system is a wireless system, the method including encoding, in up-link, data from

p users such that each forms $1/p$ of an RLC/MAC block, wherein the up-link data from each user is encoded into a respective one of p sub-time-slots.

14. (Previously Presented) The method of claim 1, including transmitting the RLC/MAC block is over four TDMA frames.